REMARKS

In the March 11, 2010 Office Action, claims 19-26, 29, 30, 32-35 and 37-48 stand rejected in view of prior art. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the March 11, 2010 Office Action, none of the claims has been amended in this Request for Reconsideration. Thus, claims 19-26, 29, 30, 32-35 and 37-48 are pending, with claims 19, 35 and 44 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of the following comments.

Examiner's Response to Amendment

In numbered paragraph 1 of the Office Action, the Office Action indicates the Declaration of Masayuki Mukaino under 37 CFR 1.132 dated February 24, 2009 (hereinafter "Mukaino's second Declaration") is insufficient to overcome the rejection because long-felt need must not have been satisfied by another before the invention by applicant. The Office Action asserts both U.S. Patent No. 6,793,028 (hereinafter the "Pack patent") and Japanese Utility Model Patent Application Publication No. 51-63032 to Yoshida (hereinafter "Yoshida publication") disclose moving the radiator on a work vehicle to the rear of the vehicle thereby allowing the front hood of the vehicle to be slanted down for increased visibility.

Applicants respectfully disagree with the assertion in the Office Action in that ***neither*** the Pack reference ***nor*** the Yoshida reference discloses ***a bulldozer*** having ***a bulldozer blade***, to which the pending claims are clearly directed. More specifically, the Pack reference discloses a truck, and the Yoshida publication discloses a track loader with a bucket instead of a bulldozer blade as claimed. Therefore, neither the Pack reference nor the Yoshida reference satisfies a long-felt need for improved ***blade*** visibility in a ***bulldozer*** as claimed. In fact, the objective evidence previously submitted by Applicants clearly shows that an art recognized problem of poor ***blade*** visibility existed in the art for a long period of time without a viable solution, and only the ***bulldozer*** having the claimed features solved this long-felt need for improved ***blade visibility***.

Accordingly, Applicants respectfully assert the objective evidence shows the bulldozer having the claimed arrangement is clearly a result of technological advances that solved the long-felt need.

Rejections - 35 U.S.C. § 103

In numbered paragraphs 2 and 3 of the Office Action, claims 19-21, 23-26, 29, 30, 32-35 and 37-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the prior art shown in Figure 1 (hereinafter "Figure 1 bulldozer") of the present application in view of the Pack patent and further in view of U.S. Design Patent No. 483,043 to Akashima et al. (hereinafter "Akashima et al. patent"). Moreover, in numbered paragraph 4 of the Office Action, claims 22 and 42 stand rejected as being obvious over the Figure 1 bulldozer in view of the Pack patent and the Akashima et al. patent, and further in view of U.S. Patent No. 6,468,153 to Sheidler et al. (hereinafter "Sheidler et al. patent"). Furthermore, in numbered paragraph 5 of the Office Action, claims 19-21, 23-26, 29, 30, 32-35 and 37-48 stand further rejected under 35 U.S.C. §103(a) as being unpatentable over the Yoshida publication, in view of the Figure 1 bulldozer of and the Akashima et al. patent. Claims 22 and 42 are further rejected as being obvious over the Yoshida publication in view of the Figure 1 bulldozer and

Akashima patent, and further in view of the Sheidler et al. patent. Applicants respectfully traverse the rejections for the reasons set forth below.

First, Applicants respectfully point out several factually inaccurate statements asserted in the Office Action, which were relied on to reach the conclusion of obviousness. Applicants herewith submit a Rule 132 Declaration of Masayuki Mukaino (hereinafter "Mukaino's third Declaration") as rebuttal evidence that supports at least some of the following arguments.

Moving Cooling Module in a Bulldozer Does Not Create Significant Imbalance

The Office Action asserts, in a combination of the Figure 1 bulldozer and the Pack patent, the cab would have to be shifted forward to account for an imbalance that would be created from placing the cooling module behind the cab (see, lines 13-15 on page 3). The Office Action also asserts, if one were to take the radiator off the front of the bulldozer and place it on the rear, an imbalance would be created, and shifting the cab forward to account for this imbalance would not be outside of the skill of a vehicle engineer (see, lines 13-15 on page 11).

However, as stated in the Mukaino's third Declaration, weight of the today's cooling module is usually so small with respect to total weight of the bulldozer that placing the cooling module on the rear side of the vehicle in the bulldozer does not create a tremendous imbalance in weight distribution, which requires considerable rearrangement of the parts of the bulldozer. Accordingly, Applicants respectfully assert one having ordinary skill in the art would not have considered it obvious to shift the cab forward to account for an imbalance, because such an imbalance would not be created by merely placing the cooling module on the rear side of the bulldozer.

Shifting the Cab Forward Does Not Correct Imbalance

Assuming for the sake of argument that some imbalance were created by placing the cooling module in the rear side of the bulldozer, which is not true as discussed above, shifting the cab forward would ***not*** correct such an imbalance.

Generally, when weight is added to one side of a machine thereby causing an imbalance in weight distribution in the machine, the simple way to correct such an imbalance is to add a counterweight on the ***opposite side*** of the machine. Therefore, if any imbalance were created by placing the cooling module in the rear side of the bulldozer, one having ordinary skill in the art would most likely add a counterweight ***on the front side*** of the bulldozer in order to correct such an imbalance. One having ordinary skill in the art could not reasonably predict the imbalance would be corrected by shifting the cab and the cooling module forward because the added weight of the cooling module would be still on the rear side of the bulldozer, and the imbalance in weight distribution would still remain. Therefore, Applicants respectfully assert, even if a significant imbalance were created by placing the cooling module to the rear side of the bulldozer as asserted by the Office Action, shifting the cab forward is not an obvious solution for correcting such an imbalance to one having ordinary skill in the art.

None of Prior Art References of Record Discloses a Cooling Module Recess Formed By Two Tank Modules Disposed On Rear of Both Lateral Sides of a Bulldozer

The Office Action apparently relies on the Akashima et al. patent to show two tank modules on a rear of both lateral sides of a work vehicle to form a cooling module recess therebetween.

However, as stated in the Mukaino's third Declaration, one having ordinary skill in the art could not reasonably ascertain based on the drawings of the Akashima et al. patent that the Akashima et al. patent discloses a tank disposed on the left side of the operator seat. In fact, as stated in the Mukaino's third Declaration, the description in the Japanese priority design application of the Akashima et al. patent states that a battery and a battery cover are disposed on the left side of the operator seat while a fuel tank module is disposed on the left side of the operator seat.

Moreover, as stated in the Mukaino's third Declaration, a fuel tank of a bulldozer commonly extends laterally on the rear side of the cab. For example, as shown in Exhibit D attached to the Mukaino's third Declaration, the fuel tank is disposed behind the cab to extend laterally in the Komatsu D41-6 model bulldozer, which basically corresponds to the bulldozer shown in Figure 1 of the present application.

Accordingly, ***none*** of the prior art of record discloses, or reasonably suggests one having ordinary skill in the art, a structure of a work vehicle in which two tank modules are disposed on a rear of both lateral sides of the work vehicle to form a cooling module recess therebetween.

Vehicle of Yoshida Publication Is Not a Bulldozer Having a Bulldozer Blade

The Office Action asserts the Yoshida publication discloses a bulldozer and interprets a bucket (2) of the Yoshida publication as corresponding to a bulldozer blade. However, one having ordinary skill in the art would have known that the bucket shown in the Yoshida publication is different from a bulldozer blade. More specifically, a bucket is used mainly for loading materials while a blade is used for pushing material. Thus, the Yoshida publication does not disclose a bulldozer having a bulldozer blade as recited in the claims of the present application.

There Is No Evidence For Shifting the Cab Forward To Protect the Cooling Module

The Office Action asserts it would have been obvious to shift the cab forward in the Yoshida publication so that the rearward positioned cooling module does not overhang the tracks thereby protecting it from damage during operation (lines 13-16 on page 7). Also, the Office Action asserts even if a significant imbalance was not created by moving the cooling module to the rear, one of ordinary skill in the art would still have shifted the cab forward so as to protect the cooling module from damage by not allowing it to hang out over the rear edge of the tracks (lines 22-26 on page 12).

Applicants respectfully assert there is absolutely ***no evidence*** of record that supports these statements in the Office Action. More specifically, ***none*** of the prior art of record discloses or suggests shifting the cab forward to protect the structure behind the cab. On the contrary, the Yoshida publication shows an arrangement in which the radiator and the fan ***overhang*** beyond the tracks, and the radiator and the fan are ***protected by a cover member***. Therefore, ***nothing*** in the prior art of record suggests desirability of shifting the cab forward to protect the cooling module as asserted in the Office Action.

* * *

Next, Applicants respectfully assert the claims of the present application are ***not*** rendered obvious over the prior art of record for the reasons set forth below.

Rejection Over FIG. 1 Bulldozer, Pack Patent and Akashima et al. patent

First, Applicants respectfully assert one of ordinary skill in the art would ***not*** have considered it obvious to combine the teachings of the Pack patent directed to a truck with the Figure 1 bulldozer directed to a conventional bulldozer.

Moreover, one of ordinary skill in the art would not take the teachings of the Pack patent and apply them to the conventional bulldozer because placing the cooling module in the rear portion of the vehicle frame is not physically practical in the bulldozer. In other words, there are different design considerations that need to be considered when designing the cooling module of the bulldozer from when designing the cooling module of the truck. The Office Action asserts Applicants fails to point out what these design considerations might be or how they are addressed in the claims, and also fails to point out why placing the cooling module in the rear portion of the vehicle frame is not physically practical. Applicants respectfully disagree with these assertions in the Office Action. More specifically, Applicants respectfully assert the different design considerations were discussed in the Mukaino's first Declaration dated July 27, 2008. The Mukaino's first Declaration states "there is usually no space in the rear portion of the vehicle frame. In other words, the rear portion of the vehicle frame of the conventional bulldozer is usually occupied by structural elements such as the transmission and the gear train for the steering system". Moreover, the Mukaino's third Declaration submitted herewith indicates that the fuel tank in the bulldozer is commonly arranged to extend laterally behind the cab. Therefore, placing the cooling module in the rear portion of the cab is not physically practical in the Figure 1 bulldozer. On the other hand, those structural elements are not usually present in the rear portion of the vehicle frame in the conventional truck, and thus, there is a large space formed in the rear portion of the cab of the truck as shown in Figure 1 of the Pack patent. Such structural differences are inherent differences between the conventional bulldozers and the conventional trucks. Thus, each of the claims of the present application clearly distinguishes over the conventional truck by requiring a ***bulldozer*** having a ***pair of tracks*** and a ***bulldozer blade***. Due to those structural differences in the conventional bulldozers and the trucks, one of ordinary skill in the art would not take the teachings of the Pack patent and apply them to the conventional bulldozer.

Second, assuming for the sake of argument that the Figure 1 bulldozer and the Pack patent were combinable, which is not true, the hypothetical combination of the references would still ***fail*** to disclose or suggest the arrangement of the bulldozer as recited in independent claims 19, 35 and 44.

More specifically, independent claims 19 and 35 recite the tracks extend rearwardly of the rear end of the vehicle frame ***to form a cooling module recess*** that is disposed laterally between the tracks and at the rear end portion of the frame along the center longitudinal axis. Moreover, independent claims 19 and 35 recite a ***rearmost end of the cooling module*** is disposed ***forwardly*** of a ***rear end of the tracks***. Clearly, ***none*** of the Figure 1 bulldozer, the Pack patent, and the Akashima et al. patent discloses or suggests this ***cooling module recess***. The Office Action asserts it would have been obvious to shift the cab forward and obtain the claimed arrangement in order to account for an imbalance created by placing the cooling module behind the cab. However, as discussed above, this reasoning is based on an erroneous assumption that an imbalance would be created by moving the cooling module. As discussed above, weight of a cooling module in a bulldozer is so small that there would be ***no*** significant imbalance created by moving a position of the cooling module.

Moreover, the Office Action further asserts, even if a significant imbalance was not created, one of ordinary skill in the art would still have shifted the cab forward so as to protect the cooling module from damage by not allowing it to hang out over the rear edge of the tracks. However, as discussed above, there is ***no evidence*** of record that shows one having ordinary skill in the art would have shifted the cab forward to protect the structure behind the cab. For example, on the contrary to the assertion in the Office Action, the Yoshida publication shows a structure that allows the cooling module to hang out over the rear edge of the tracks. In the Yoshida publication, the radiator and the fan are protected by providing a cover member around them. Therefore, even if one having ordinary skill in the art were to modify the Figure 1 bulldozer to place the cooling module on the rear side of the vehicle in view of the Pack patent, there is no evidence of record that provides an ***apparent reason*** for one having ordinary skill in the art to shift the cab forward to protect the cooling module.

The Office Action also asserts if one were to take the teaching of the Pack patent and use it in the Figure 1 bulldozer, they would not simply tack it on to the machine, and it would have been well within the skill of one of ordinary skill in the art to shift the cab forward so that the foot print of the cab and engine compartment would remain the same. However, the Yoshida publication apparently shows an example that the radiator and the fan are simply tacked onto the machine. On the other hand, there is ***no evidence*** of record that supports the Office Action's assertion that one would shift the cab forward "so that the foot print of the cab and engine compartment would remain the same".

Furthermore, even if assuming for the sake of argument that one having ordinary skill in the art were to shift the cab forward to place the cooling module behind the cab, there is

nothing in the prior art of record that suggests the cab will be shifted such a distance that a ***rearmost end of the cooling module*** is disposed ***forwardly*** of a ***rear end of the tracks***.

Accordingly, Applicants respectfully assert the Office Action's conclusion of obviousness that one would have shifted the cab forward to obtain the claimed arrangement has no factual basis and is based on improper hindsight reasoning.

Moreover, independent claim 44 requires a first tank module disposed on a rear of a first lateral side of the bulldozer and a second tank module disposed on a rear of a second lateral side of the bulldozer, and ***a cooling module recess*** is formed laterally ***between the first and second tank modules***. The Office Action apparently relies on the Akashima et al. patent to allegedly show the rearwardly extending tanks. However, as discussed above, one having ordinary skill in the art could not reasonably ascertain that the Akashima et al. publication shows two tanks disposed on the right and left sides of the operator seat. In other words, ***none*** of the prior art of record shows ***a cooling module recess formed laterally between the first and second tank modules at a rear end portion of the frame*** as recited in independent claim 44. Thus, the arrangement recited in independent claim 44 is not rendered obvious over the Figure 1 bulldozer, the Pack patent and the Akashima et al. patent, whether taken singularly or in combination.

Rejection Over Yoshida Publication, FIG. 1 Bulldozer and Akashima et al. patent

First, Applicants respectfully assert one of ordinary skill in the art would ***not*** have considered it obvious to combine the teachings of the Yoshida publication directed to a front loader with the Figure 1 bulldozer directed to a conventional bulldozer in a way asserted by the Office Action.

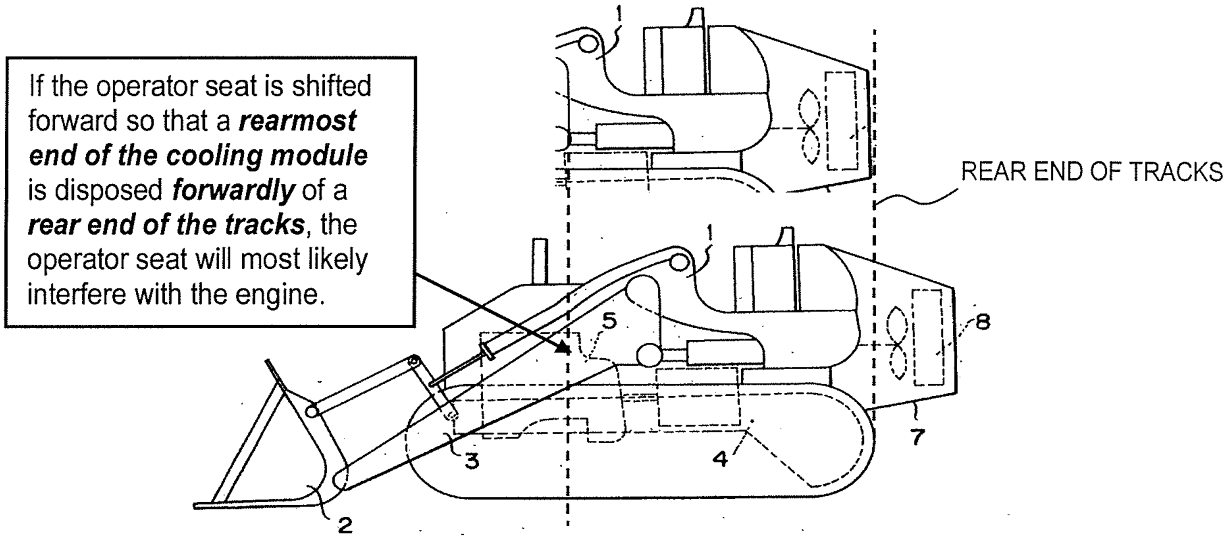
More specifically, a work vehicle disclosed in the Yoshida publication is a so-called "track loader", which is equipped with a bucket instead of a bulldozer blade. As discussed in the Mikaino's third Declaration, unlike a bulldozer blade whose main function is to push material, a bucket of the track loader is usually used for picking and loading material, and the bucket filled with material is moved up and down during loading operation. In other words, the track loader requires a different performance expected from a bulldozer, and the design object for a track loader disclosed in the Yoshida publication is completely different from that of a bulldozer. More specifically, in order to counterbalance load imparted on the bucket during loading operation, the Yoshida publication discloses a structure in which the radiator and the fan are placed on the rear side of the operator seat so that the center of gravity of the vehicle is placed toward the rear side (see, lines 9-11 on page 2). On the other hand, in general, a position of the center of gravity of a bulldozer body is preferably set toward a front portion of the bulldozer as discussed in the Mukaino's third Declaration. Thus, placing the center of gravity on the rear side of the vehicle as proposed in the Yoshida publication is undesirable in the bulldozer with a bulldozer blade. Thus, one of ordinary skill in the art would not have considered it obvious to place the cooling module on the rear side of the bulldozer in view of the disclosure in the Yoshida publication because (1) counterbalancing the load imparted on the bucket is not a concern when designing a bulldozer, and (2) moving the center of gravity toward the rear side of the vehicle is not desirable when designing a bulldozer.

Second, assuming for the sake of argument that the Yoshida publication and Figure 1 bulldozer were combinable as asserted by the Office Action, which is not true, the hypothetical combination of the references would still ***fail*** to disclose or suggest the arrangement of the bulldozer as recited in independent claims 19, 35 and 44.

More specifically, independent claims 19 and 35 recite the tracks extend rearwardly of the rear end of the vehicle frame ***to form a cooling module recess*** that is disposed laterally between the tracks and at the rear end portion of the frame along the center longitudinal axis. Moreover, independent claims 19 and 35 recite a ***rearmost end of the cooling module*** is disposed ***forwardly*** of a ***rear end of the tracks***. Clearly, ***none*** of the Yoshida publication, the Figure 1 bulldozer and the Akashima et al. patent discloses or suggests this ***cooling module recess***. The Office Action asserts it would have been obvious to shift the cab forward in the Yoshida publication so that the rearward positioned cooling module does not overhang the tracks thereby protecting it from damage during operation. However, the Yoshida publication discloses a structure in which the rearward positioned cooling module overhangs the tracks, and the cooling module is protected by the cover member surrounding the cooling module. Applicants respectfully assert ***nothing*** in the prior art of record suggests shifting the cab forward to protect the cooling module. Accordingly, Applicants respectfully assert the conclusion of obviousness that one would have shifted the cab forward to protect the cooling module is based on improper hindsight reasoning.

Moreover, Figure 1 of the Yoshida publication shows no space between the operator seat and the engine in the engine compartment to allow the operator seat move forward by such a distance that a ***rearmost end of the cooling module*** is disposed ***forwardly*** of a ***rear end of the tracks*** (please see the annotated version of Figure 1 of the Yoshida publication as reproduced below). Therefore, Applicants believe one having ordinary skill in the art would

not have considered it obvious to shift the cab forward to obtain the arrangement as recited in independent claims 19 and 35.



If the operator seat is shifted forward so that a ***rearmost end of the cooling module*** is disposed ***forwardly*** of a ***rear end of the tracks***, the operator seat will most likely interfere with the engine.

REAR END OF TRACKS

Moreover, independent claim 44 requires a first tank module disposed on a rear of a first lateral side of the bulldozer and a second tank module disposed on a rear of a second lateral side of the bulldozer, and ***a cooling module recess*** is formed laterally ***between the first and second tank modules***. The Office Action apparently relies on the Akashima et al. patent to allegedly show the rearwardly extending tanks. However, as discussed above, one having ordinary skill in the art could not reasonably ascertain that the Akashima et al. publication shows two tanks disposed on the left and right sides of the operator seat. In other words, ***none*** of the prior art of record shows ***a cooling module recess formed laterally between the first and second tank modules at a rear end portion of the frame*** as recited in independent claim 44. Thus, the arrangement recited in independent claim 44 is not rendered obvious over the Yoshida publication, the Figure 1 bulldozer, and the Akashima et al. patent, whether taken singularly or in combination.

Under U.S. patent law, the mere fact that the prior art can be modified does ***not*** make the modification obvious, unless an ***apparent reason*** exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." Id. at 1741. The current record lacks any apparent reason, suggestion or expectation of success for modifying the patents to create Applicants' unique arrangement of the bulldozer as recited in independent claims 19, 35 and 44.

Finally, Applicants respectfully assert the present case exhibits strong showing of objective evidence of nonobviousness, which is part of the four-part test set forth in *Graham*. Applicants refer to line 11 on page 9 to line 11 on page 13, and line 5 on page 15 to line 7 on page 20 of the Applicants' October 26, 2009 Response for the detailed arguments.

Dependent Claims

Applicants believe that the dependent claims clarify the scope of independent claims 19, 35 and 44 as well as add novel features. For example, claims 20, 21, 41 and 43 clarify that independent claims 19 and 35 do not require a roof or cab, while claim 24 clarifies that independent claims 19 and 35 do not require the tracks to be of a separate module that is attached to the frame. Also, claims 22 and 42 further limit that the cooling module includes a radiator core having a charged air cooling unit, an oil cooling unit and a water cooling unit, and a fan for moving air through the radiator.

Accordingly, Applicants believe that the features of the dependent claims are also allowable over the prior art of record in that they depend from independent claims 19 and 35, and therefore, are allowable for the reasons stated above. Also, the dependent claims are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not disclose or suggest the invention as set forth in independent claims 19 and 35, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Therefore, Applicants respectfully request that this rejection be withdrawn in view of the above comments and amendments.

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In view of the foregoing amendment and comments, Applicants respectfully assert that claims 19-26, 29, 30, 32-35 and 37-48 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Of course, if there are any questions, please feel free to contact the undersigned.

Respectfully submitted,

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